The Agile Operations Bridge

Micro Focus® Operations Bridge services for better Hybrid IT Operations.

Product Overview
Driven by cloud, mobile, big data and DevOps, Hybrid IT delivery promises to bring agility and improved service delivery to business users. But these same trends are also turning already challenging IT Operations into a much more complex world.

While business users are now often choosing to obtain services from external vendors, they still expect IT to manage service delivery and ensure that applications are available. So how does IT ensure service delivery when:

■ Users are bringing their own devices
■ Applications are becoming more composite
■ The infrastructure is virtual and software defined
■ Workloads run in the cloud
■ Agile development is increasing the velocity of change
■ Security risks are on the rise

IT can ensure that it is not overwhelmed by the pace and magnitude of change in the world it is entrusted with, by rethinking, retooling, and evolving its Operations Bridge services to “The agile Operations Bridge.”

You Can’t Just Throw It over the Fence
Over the last two decades, many IT departments have invested heavily in IT Operations. As new technologies were adopted, so were new tools to monitor these technologies. This has added up to a situation where the average IT department now has dozens of monitoring tools, yet the ability to prevent the business impact of outages has not markedly improved as one would have expected. So the issue is clearly not with insufficient technology, and more monitoring is not necessarily better monitoring.

The reality is that most IT organizations (even those that adhere to ITIL) view Service Operations in isolation of the service lifecycle. In most cases currently, monitoring is an after-the-fact activity. Applications and services are built (or bought), released, and then handed over to IT Operations for monitoring with most projects treating monitoring as a box they need to check off before they can go live. This is akin to thinking that winning a championship game begins when the referee blows the whistle, while ignoring all of the training and planning that needs to take place prior to the start of the game.

Key Benefits

■ **Reduce Business Impact of Outages**
  With all of your events now in one place and able to be correlated, you can more rapidly diagnose the situation, quickly identify the corrective action needed, and restore service with minimum disruption to the users.

■ **Increase Productivity**
  Event aggregation and correlation means that your IT Operations don’t have to spend time wading through large numbers of events to find those that require action. Template-based, automated monitoring deployment allows you to apply monitoring faster and with less manual intervention.

■ **Reduce Monitoring TCO**
  Through standardization and automation, duplication of effort and tooling is eliminated.
So while many IT organizations have plenty of technology and have implemented various forms of Operations Bridge (typically called a NOC), they are not realizing the full potential because so much of the value of the Operations Bridge depends on what happens before ever going live.

“Shift Left” Monitoring
To increase the value from an Operations Bridge, you need to “shift left” and adopt a “monitoring by design” approach. This simply means starting to think about how and what to monitor much earlier than has traditionally been the case. It means incorporating monitoring into the requirements and the design, so that when you deploy to your users, everything is already instrumented and in place to allow you to collect the data you need. It means defining standards and working closely with development teams so you can automate as much as possible. It means understanding up front what data you need so you know how best to collect, process, and report it.

Predictive Service Operations
You also need to recognize that being good at monitoring (which many IT organizations are) is a prerequisite—not a guarantee—for good service delivery. The prevailing view considers monitoring services as the end rather than the means, as if simply by monitoring, a root cause will reveal itself when the system has an issue. However, as is the case with most complex systems, the whole is greater than the sum of its parts. Monitoring is a tool meant to help IT Operations do their job, not to exist for its own sake. In short, monitoring services alone are not enough.

To improve delivery of business service management services, IT needs to expand the scope of the Operations Bridge and turn it into the core element of Predictive Service...
Operations—a holistic, service oriented approach to IT Operations.

**Key Features**

Your IT organizations is becoming more agile. Whether it is the adoption of DevOps or the increasing use of cloud and self-service provisioning, everything is moving faster, and your Operations Bridge must also become agile to continue to deliver value. There are several elements to the agile Operations Bridge:

**Governance Framework**

Business services have a lifecycle. For a successful Operations Bridge, the lifecycle must ensure that everything is in place for Service Operations (or as known by The Open Group, the Detect-to-Correct value stream) as soon as the service goes live. This means that there are certain things that need to take place much earlier in the lifecycle. For example:

- Understanding what data will flow through the Operations Bridge so it can be provided to the various roles involved, in the manner most suitable for them to make the right decision based on accurate and timely information
- Definition of standard monitoring templates so that these might be offered in a service catalog and to increase the efficiency of deploying monitors
- Definition, discovery, and modeling of the service to drive event correlation and root cause analysis

The role of governance is to ensure that the IT value chains embed these principles so that the Operations Bridge delivers maximum value.

**Simplify**

The way that application monitoring services have evolved historically has led to a proliferation of tools, many of them with overlapping capabilities. These tools were primarily designed to help experts (such as DBAs) monitor the components they are responsible for. New technologies, such as cloud and mobile, require additional monitoring capabilities that add to the cost and complexity of managing and integrating an ever-growing fleet of monitoring tools.

On top of that, you also need to account for service discovery and modeling. While you may have implemented mechanisms to aggregate and reduplicate the events that these tools generate, this is insufficient for the same reason a doctor would be unable to make a diagnosis simply based on symptoms but with no understanding of anatomy or physiology. The anatomy of business service management services—a also known as the service model—is crucial to providing the context for fast and efficient prioritization, root-cause analysis, and minimization of any business impact from outages. Here too, it is likely that you have multiple discovery tools and methods.

Exacerbating this problem is the fact that you probably have as many monitoring standards and templates as you have tools. What you therefore need is a simplified application monitoring architecture that allows you to reduce the costs associated with managing your Operations Bridge by consolidating your monitoring standards into a single set that you consistently apply across your entire environment.

What you therefore need is a simplified application monitoring architecture that allows you to reduce the costs associated with managing your Operations Bridge by consolidating your monitoring standards into a single set that you consistently apply across your entire environment.

![Figure 3. Automate, Unify, Simplify](image-url)
Unify
Unifying monitoring data and service models into one platform enables you to drive better decision making. An Operations Bridge receives a large volume of events (research suggests this volume has risen by 300 percent over the last five years) that need to be prioritized and processed. However, not all events are born equal and you would want to first address the events with the highest business impact. Service models provide the business context for prioritization. Service models also allow you to tell ‘symptom’ events from ‘cause’ events by correlating them based on the service model. You can then focus your resources where they are most needed and where they can be most productive: fixing priority root causes, not chasing unimportant symptoms.

Having all of this data in one location will help you achieve that. Functions such as service delivery, helpdesk, and capacity management can now unify their processes as they better collaborate over a unified data set to enhance their own productivity and the value they provide.

Simplifying and unifying sets you up with the right foundation for automation.

Automate
Increasing productivity requires automation. Yet the three core activities of an Operations Bridge—monitor deployment, remediation, and reporting—are still, by and large, executed manually.

The benefits of automation are clear when it comes to monitoring deployment. Rather than the current manual or policy-based methods, you can now use configuration item (CI)-based deployment. As soon as your discovery finds a new item (e.g., an app server), it can automatically deploy all of the monitors that your standards have defined. The Holy Grail of automated remediation is now within reach.

When you can see the whole picture end-to-end, you can begin to automate the incident lifecycle and become even more efficient at resolving issues. You can focus on the right events and create tickets that direct the right experts toward the root cause. You can take it even further and use scripts to automatically take corrective action when issues strike, thus eliminating even the need for an expert to be involved.

Simplifying and unifying now allow you to also automate analytics. With all of the performance data in one place, you can perform predictive analysis to anticipate capacity constraints, preempt performance degradation, or just report on service level agreements.

The Simplify, Unify, Automate approach will help you increase your productivity and dramatically enhance the value you get from your Operations Bridge.

Think Big, Start Small
You may be thinking to yourself “The agile Operations Bridge is a nice concept, but I need to first use all my tools to their fullest capacity.” We at Micro Focus Professional Services believe that to succeed in any endeavor, you need to set—and keep—your sights on the big picture, while at the same time take an incremental approach. Start with some quick wins and move on to the bigger items. We believe that your roadmap should allow you to reach your final destination through gradual implementation, with each step adding more capabilities while building on the success of the previous achievements. And we have designed our portfolio to do just that.

Operations Bridge Foundation Service
This offering from Micro Focus Professional Services puts existing Micro Focus Operations Manager customers on the right path toward an Operations Bridge. Using Operations Manager-i, the market-leading Operations Bridge platform, we onboard a service of your choosing by:
- Deploying Operations Manager-i as the core of the platform
- Migrating agents and policies from Operations Manager
- Aggregating events and monitoring data
- Discovering your service and creating the service model
- Configuring event processing rules, including Basic as well as Topology and Stream-Based Event Correlation (TBEC & SBEC)
- Automating monitoring deployment
- Integrating with a ticketing/notification system

After we complete the onboarding process, we provide you with a documented procedure so that you can continue to onboard additional services onto the platform.

Agile Operations Bridge Service
This offering implements a governance framework that enables you to consistently and successfully onboard Operations Bridge services. Ultimately, this means being able to understand what information you need to collect, how to collect it, and how to best represent and deliver it to the stakeholders, whether these are people, processes, or tools.

Model and Organize
One of the most common mistakes in implementing an enterprise-scale Operations Bridge is focusing on the technology as the first step. In our view, effective tooling and automation rely on standardization of processes. This is why we begin by modeling and organizing as they are the foundation for standardization. We do this by working with you to:
- Define what a service is
- Match discovery and modeling to event processing and reporting
Define organizational structure and roles
Determine accountability for the provisioning and consumption of information

Standardize
Once we understand the current situation, we can begin to devise methods to standardize your tools, metrics, reports, dashboards, roles, and responsibilities. We achieve this by:
- Defining the authoritative sources (tools) of information
- Defining standards for information presentation, monitoring, owners, and consumers
- Defining responsibility for data collection
- Consolidating tools

Automate
The last stage of the journey is to leverage your technology to automate and accelerate the process from demand to consumption, thus improving information quality and accuracy. Here we use Operations Bridge to automate the deployment of:
- Role-based reports
- Role-based dashboards
- CI-based monitors

Benefits
Reduce Business Impact of Outages
With all of your events now in one place and able to be correlated, you can more rapidly diagnose the situation, quickly identify the corrective action needed, and restore service with minimum disruption to the users.

Increase Productivity
Event aggregation and correlation means that your IT Operations don’t have to spend time wading through large numbers of events to find those that require action.

Template-based, automated monitoring deployment allows you to apply monitoring faster and with less manual intervention.

Reduce Monitoring TCO
Through standardization and automation, duplication of effort and tooling is eliminated.

The Micro Focus Professional Services Difference
Micro Focus provides unmatched capabilities with a comprehensive set of consulting and implementation services and unique intellectual property that help you drive innovation through streamlined and efficient software delivery.
- Proven Micro Focus software solution implementation expertise
- More than 20 years of experience helping large, complex, global organizations realize value from their Micro Focus software investments
- Rich intellectual property and unparalleled reach into product engineering
- Technology-agnostic implementation approach with no vendor lock-in, no rip-and-replace
- Education and support services to ensure adoption

Learn more at www.microfocus.com/itomservices